

**REMARKS**

Claims 1-25 are currently pending in the subject application and are presently under consideration. Claims 1, 13, 18 and 23-25 have been amended as shown on pp. 2-7 of the Reply.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1-25 Under 35 U.S.C. §102(e)**

Claims 1-25 stand rejected under 35 U.S.C. §102(e) as being anticipated by Singh (US Patent Pub. No. 2004/0068526). Singh does not teach each and every element of the subject invention as recited in the subject claims.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes ***each and every limitation*** set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ***The identical invention must be shown in as complete detail as is contained in the ... claim.*** *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). (emphasis added).

The subject invention is directed to managing and coordinating modification translation between data and representations. In particular, independent claim 1 (and similarly independent claims 13, 18, 23, 24 and 25) recites similar limitations, namely, a system and method that synchronizes electronic data and representations of the electronic data, comprising, ***a map bank that stores relationships between the electronic document and the representations, the relationships provide descriptions which declaratively describe the electronic document and the representations, and wherein the representations comprise at least one of a complete representation and a partial representation of the electronic document; and a mapping engine that engine that retrieves suitable relationships from the map bank, facilitates representation generation, and utilizes at least one relationship to synchronize the electronic data and the representations such that a modification to the electronic data is mapped to the representations and a modification to a representation is mapped to the electronic data and the remaining representations, wherein the modification is translated to the electronic data dynamically by automatically updating the electronic data upon commitment or explicitly by initiating a***

***transaction on the representation to update the electronic data.*** Singh does not teach or suggest the aforementioned novel aspects of applicant's claimed invention.

Singh teaches a system for generating mapping schemes used to create and store electronic documents. Information about the attributes of the source is read in a source data definition, and information about the attributes of the target is read in a target data definition. The attributes of the source and the target may be arranged in hierarchical levels within their respective data definitions. Commands from a user are then received creating a mapping between the attributes of the source and the attributes of the target. Multiple attributes of the source may be mapped to a single attribute of the target, and multiple attributes of the target can be mapped to a single attribute of the source. Commands, specifying actions to be performed when data from the source is converted to the target, may also be received from a user. A mapping scheme is then generated using the source and target data definitions, the mapping between the source and target attributes, and the actions defined on the source and the target. (See paragraph [0029]).

In contrast, applicant's claimed invention discloses a system that synchronizes data and representations *via* a data/representation relationship, or model, which provides a description of the relationship between data and a representation. This relationship can be utilized to translate a modification made to either the electronic data or the representation thereof to respective representation(s) or electronic data. The system comprises a map bank that is utilized to store the data-representation relationships. Such relationships (models) provide descriptions, which can declaratively describe relationships between a data type and respective representations. Such declarations can be provided *via* markup language (e.g., xml files or infosets) and/or memory strings, for example. The representations can be a complete representation of the data or a partial representation, wherein relevant portions (e.g., portions affected by the modification) of the data are represented. The user can modify the representation, wherein the modification can be translated to the data dynamically and/or explicitly, for example, to synchronize the data and representation. Dynamically generally refers to detecting a change and automatically updating data upon commitment, and explicitly generally refers to initiating a transaction on the representation to update the data.

The system also comprises a mapping engine that retrieves suitable data-representation relationships from the bank, facilitates representation generation, and employs the relationships

to translate or map modifications between data and representations. For example, the mapping engine can retrieve and utilize a relationship to map data related operations to representation operations. Such mapping provides the mapping engine with the ability to translate a modification made to the data or representation to respective representations or data. Thus, the relationship is utilized to map any modification made to the data. Accordingly, the user employing the representation is provided with a current view of the data, which mitigates making invalid, erroneous and conflicting changes due to editing an inaccurate representation. (See pg. 7, line 27-pg. 9, line 10).

Singh merely discloses using the mapping scheme to create an electronic document with data from the source, in the particular format required by the target data definition. The data from the electronic document is converted to the format required by the target, according to the mapping between the source and target attributes and according to the actions defined by the user, and is stored in the target. (See pg. 6, paragraph [0063]). Whereas, applicant's claimed invention synchronizes data and representations *via* a data/representation relationship, or model, which provides a description of the relationship between data and a representation. When a user attempts to modify data of this type, the relationship is employed to create a representation of the data. After a representation is created, the data can change, wherein the system employs the relationship to map any modification made to the data. Thus, Singh is silent with regard to a system that synchronizes electronic data and representations of the electronic data, wherein..., *a map bank stores relationships between the electronic document and the representations, the relationships provide descriptions which declaratively describe the electronic document and the representations,...; and a mapping engine that engine that retrieves suitable relationships from the map bank, facilitates representation generation, and utilizes at least one relationship to synchronize the electronic data and the representations....*

Accordingly, Singh fails to teach or suggest all limitations of applicant's invention as recited in independent claims 1, 13, 18, 23, 24 and 25 (and claims 2-12, 14-17 and 19-22 that respectively depend there from), and thus fails to anticipate the claimed invention. Consequently, this rejection should be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP569US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,  
AMIN, TUROCY & CALVIN, LLP

/Marisa J. Zink/  
Marisa J. Zink  
Reg. No. 48,064

AMIN, TUROCY & CALVIN, LLP  
24<sup>TH</sup> Floor, National City Center  
1900 E. 9<sup>TH</sup> Street  
Cleveland, Ohio 44114  
Telephone (216) 696-8730  
Facsimile (216) 696-8731